Transcript to accompany BRC-BIO Webinar 10-11-22 (some edits have been made for clarity)

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00:01:33.840 --> 00:02:03.760

Amanda Simcox: Welcome to the BRC-BIO Webinar. We'll be sharing some slides with you in a moment. But while we're still fairly big on your screen, I like to introduce myself and the rest of the team. I'm a program officer in the Division of Biological Infrastructure, and I work on BRC-BIO, and also a number of training programs, including the REU, which is Research Experiences for Undergrads, and postdoc fellowships (PRFB). I'm going to introduce my colleagues as they appear on my screen. So you're up Bianca.

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00:02:17.000 --> 00:02:25.739

Bianca Garner: Hello, everyone. I'm Bianca Garner, a program officer in the division of Molecular and Cellular Biosciences, and I work on the BRC-BIO in addition to Future Manufacturing. See how those are linked together. So it's good to have you this afternoon.

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00:02:33.520 --> 00:02:35.920

Amanda Simcox: Thank you. Bianca, Andrea.

Andrea: I'm a new Program Officer in DBI and I work in BRC-BIO and PRFB.

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00:02:49.940 --> 00:02:52.190

Amanda Simcox: Thank you. Andrea, Collette.

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00:02:52.930 --> 00:03:11.369

Colette St. Mary IOS: Hello, everyone I'm Colette, St. Mary. I'm a permanent program director in the Behavioral Systems cluster in the Division of Integrative and Organismal Systems. I'm also a program director in BRC-BIO, as well as EEID and the new Uh partnerships to advance conservation, science and policy.

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00:03:19.800 --> 00:03:22.380

Amanda Simcox: Great. Thank you, Colette, Jeremy.

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00:03:23.030 --> 00:03:39.930

Jeremy Wojdak - DEB: Welcome everyone. I'm Jeremy Wojak a rotating program director in the Division of Environmental Biology. Before coming to NSF, I was at a primarily undergraduate institution, one of the targets for the BRC-BIO program.

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00:03:40.180 --> 00:03:48.030

Amanda Simcox: Great, thank you very much, Jeremy. So with no further ado we'll start our slides. I'm going to share my screen.

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00:03:50.250 --> 00:04:03.370

Amanda Simcox: Ah, there it is, all right. So you've heard the introduction. This is our program, and this is the solicitation that anyone applying will need to go to and read very, very thoroughly.

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00:04:03.710 --> 00:04:31.030

Amanda Simcox: We did our introductions and here (slide) you see, on names, and you can contact all of us by using our alias BRC-BIO@nsf.gov. And we all look at those emails, and we respond back to you and maybe ask you for a summary of your project. With this, we can get you to the program officer (as you heard we all come from different divisions) with the best expertise for you.

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00:04:31.040 --> 00:04:35.879

Amanda Simcox: I'm going to hand over now to my colleagues, and they're going to lead you through these slides.

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Colette St. Mary IOS: I'm going to start with the goals of the BRC-BIO program. This is fundamentally a program intended to enhance the research capacity of our faculty across the nation by supporting new faculty of biology at minority serving institutions, predominantly undergraduate institutions and other universities, and colleges that are not among the Nation's most research-intensive institutions. And these institutions are undersubscribed in our portfolio so we are eager to engage them, and this is one of the mechanisms we're using to engage them. Further, We also recognize that these institutions are home to a greater diversity of faculty, and especially a greater diversity of students. Through the expansion of research in those environments we hope to broaden participation in the biological sciences as well and we explicitly want to expand opportunities for groups that are underrepresented in biology: African Americans, Hispanics, Latinos, Native Americans, Alaska natives, Native Hawaiians, and other pacific islanders, as well as persons with disabilities.

00:06:18.770 --> 00:06:29.289

Colette St. Mary IOS: But we also recognize that there are populations of students that are historically underserved in ah rural areas and in some inner city institutions. And so we definitely want to recognize those underserved populations with this effort as well.

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00:06:40.750 --> 00:06:42.059 Colette St. Mary IOS: Next, please.

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00:06:46.260 --> 00:06:47.520 Colette St. Mary IOS: Okay,

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00:06:47.750 --> 00:07:06.530

Colette St. Mary IOS: The eligibility—there are eligibility criteria that apply to both the institution and to the PI themselves. So the institutions must not be amongst the nation's most research intensive, which is defined as <u>not</u> Category R1 on the Carnegie classification system. So these include predominantly undergraduate institutions, and some minority-serving institutions, the majority of other institutions that are classified as R2, specialty institutions or M1-3, which are different classifications of master's universities.

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00:07:41.160 --> 00:08:04.680

Colette St. Mary IOS: The PI must be at the rank of assistant professor or equivalent, and in that that rank for no longer than three years. By the proposal submission, date. The P1's appointment must have both research and educational responsibilities.

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00:08:04.690 --> 00:08:13.309

Colette St. Mary IOS: And we especially are eager to receive proposals from members of under underrepresented groups in the biological sciences.

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00:08:13.320 --> 00:08:14.460

Next, please,

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00:08:18.070 --> 00:08:20.100

Colette St. Mary IOS: What do these awards support?

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Colette St. Mary IOS: They support new faculty to initiate and build independent research programs and thereby enhance their research capacity for future research. Future submissions to the NSF in fact.

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00:08:37.510 --> 00:08:52.719

Colette St. Mary IOS: The projects can include biology-focused research. (And include) Collaborations, so those may be among faculty at the same institution, or across peer, or even including research-intensive institutions. It could include partnerships with industry, or other non-academic partners to advance the candidate's research program.

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00:09:03.010 --> 00:09:22.090

Colette St. Mary IOS: The projects should enable the establishment of sustainable research programs. So they are intended to set the stage for future research projects, including submissions to the NSF, programs, such as CAREER or the core programs (in each BIO division)

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00:09:22.560 --> 00:09:32.390

Colette St. Mary IOS: We also expect these projects to establish and enrich the undergraduate research experiences at the institution and thereby help to grow the stem workforce through engagement of undergraduates.

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Colette St. Mary IOS: The proposals are quite different from our standard proposals.

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Colette St. Mary IOS: The project description is limited to only six pages, in which you need to describe the intellectual merit of the project as well as the broader impact.

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00:09:59.650 --> 00:10:13.829

Colette St. Mary IOS: The intellectual Merit section should articulate a compelling, overarching research goal for the research program. And then specific research questions that will be addressed in this project with a brief but feasible research plan to address those questions.

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Colette St. Mary IOS: All fields supported by the BIO directorate are eligible.

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Colette St. Mary IOS: This research should provide a solid foundation to build a longer-term sustainable research program, which means you need to allude to research that you expect to be able to do in the future after this project is complete.

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00:10:44.270 --> 00:10:58.269

Colette St. Mary IOS: The broader impacts discussed in this project description should include how the proposed activities will increase participation of undergraduate students in biology. This can be quite brief, since overall the page limit is so short, and also because you are able to say more about your plans to engage undergraduates, and the goals you have set with respect to that as well as your future research plan in the other proposal documents.

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00:11:33.540 --> 00:11:50.149

Colette St. Mary IOS: There are two other proposal documents. The first is the impact statement. This is a very important document--a two-page document that explains the likely impact of the project for launching the PI's research program, but also for their overarching career development and building research capacity at the Institution, as well as the impact on undergraduate research experiences. And you know, for instance, what you hope to achieve by increasing undergraduate participation.

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00:12:30.400 --> 00:12:35.730

Amanda Simcox: I'm not sure about for others, but the internet was breaking up. Is it breaking up for you Bianca?

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00:12:37.460 --> 00:12:46.909 Bianca Garner: Yes, it is okay.

Amanda Simcox: Colette your Internet was breaking up. We're nearly at the time I think we're switching to you, anyway, Bianca. Do you want to just take it from here?

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00:12:51.680 --> 00:12:54.950

Bianca Garner: So in addition to the required impact statement, we also require an institutional letter of support. And the reason why we have these two separated is because you'll actually be submitting them in different spots. Right? And so this institutional letter of support is a one-page letter from your department head, or some other senior official at your institution who can speak about your eligibility as well as provide some statements of support concerning the research plan as well as teaching. So this needs to be someone who's familiar with not just you as a person, but you how you plan to develop this program at your institution.

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00:13:37.750 --> 00:13:58.249

Bianca Garner: (No problem, Colette) As we go along, if you have questions, because we're presenting you with a lot of information, please place them in the Q&A. And at the end of the slides we'll go back, and we'll begin answering them. But if you have a question, you don't have to wait until the end. You can go ahead and drop that into the Q&A.

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00:14:00.470 --> 00:14:13.769

Bianca Garner: So we wanted to take a little moment and talk with you about the budgets. You have up to four hundred and fifty thousand dollars in research costs, and in addition to that fifty thousand dollars in justified equipment costs for a three year period. So the max that your budget should be is five hundred thousand dollars. This includes both direct and indirect costs.

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Bianca Garner: Now, as you're thinking about what you need to support you in this endeavor, you can support or ask for support that includes fifty percent teaching release time during the academic year, plus two months of summer salary. And this is another unique factor of BRC-BIO. It is NSF's policy to normally only award two total months of salary. So with BRC-BIO, because we understand teaching is an important component of this research project you can request an additional amount.

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Bianca Garner: We also request that you support personnel, or that you can support personnel and those can include undergraduates, postbacs, laboratory technicians, and even post-doctoral associates. Remember, though, if you support or you ask for post-doctoral associates you must complete and submit a mentoring plane.

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00:15:29.810 --> 00:15:45.510

Bianca Garner: Okay, in addition to human resources, there are other acceptable forms of support that you can request, and those include travel for conferences, or even to go to another institution to learn a technique, contractual services as needed, as well as supporting collaborations with other institutions or other agencies. So when we say other institutions, these don't have to be PUIs or HBCUs, they can be R1s. But, as the wording says, it must be strongly justified.

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00:16:07.160 --> 00:16:08.890 Bianca Garner: Next slide, please. 00:16:10.590 --> 00:16:21.670

Bianca Garner: So this is an important slide. These are our target dates and timelines. So what a target means is that there's a submission window. It doesn't mean that you can submit the proposal any time during the year, you must submit it during these framework. So if you're familiar with NSF's BIO Directorate, for our core programs, we have what we call no deadlines. So if you finish the proposal in February you submit in February. For BRC-BIO, you must submit during one of these windows in 2022. The next window is December, 1-31. Any time during that month you can submit your proposal.

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Bianca Garner: The next submission window after that is 2023, and that is June. The whole month of June is the next deadline. We are making changes to this process. So it is important that you be really mindful of the next two submission windows.

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00:17:20.300 --> 00:17:21.949 Bianca Garner: next slide, please.

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00:17:25.599 --> 00:17:30.409

Bianca Garner: We wanted to talk to you a little bit about the review process.

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00:17:30.420 --> 00:17:59.320

Bianca Garner: Dedicated panels are actually identified for BRC-BIO proposals, and these panels are from reviewers from similar institutions. they make sure to review for the solicitation-specific criteria such as that impact statement so they're looking to determine how this particular project is going to impact your career trajectory, both teaching and research,

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Bianca Garner: The proposal should be understandable by someone who is not (necessarily) a scientist in the proposed questions, techniques or approaches. So six pages—in the six pages, you've got to give these reviewers enough background information so that they understand the topic, and then you've got to give them enough general background, so that they understand the actual techniques that are being performed, and why they are important.

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00:18:28.590 --> 00:18:38.200

Bianca Garner: So it's six pages, and you have a lot to do, but you've got to make sure that the research question is clear, and that the techniques are applicable

00:18:38.210 --> 00:18:39.929 Bianca Garner: Next slide, please.

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00:18:41.610 --> 00:18:50.090

Bianca Garner: So, as you're thinking about your proposal. We want you to think about it from the solicitation Specific criteria,

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00:18:50.100 --> 00:19:02.730

Bianca Garner: Is it clear what the potential of the project is to increase the quantity, quality, and capacity of your research?

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Bianca Garner: What is the potential to increase the diversity and the number of students engaged in authentic research experiences? So this should not just be hands in a lab type activities. Think about how you're really going to engage these students in unique and critical ways.

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00:19:24.970 --> 00:19:31.269

Bianca Garner: What is the institutional support for the activity as described by the institutional support letter?

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00:19:31.300 --> 00:19:34.740

Bianca Garner: This is very important, this last statement, if the proposal is linked to other partnerships or collaborations, what is the nature and the impact of that interaction? So it's not simply that you have someone or that you're working with a partner. But how do those interactions lead back into that increasing capacity? Next slide, please.

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00:20:02.690 --> 00:20:10.380

Bianca Garner: So reviewers will review and evaluate all merit review criteria. So proposals must have a strong intellectual merit component. Colette talked a little bit about this. This is your scientific question. This is that fundamental biological research question, remember, can't be medically oriented. It has to be a biological fundamental question.

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00:20:28.230 --> 00:20:31.789

Bianca Garner: Then the reviewers are going to look at the broader impacts.

00:20:32.070 --> 00:20:44.869

Bianca Garner: What's being accomplished? Who's being impacted? And what is the bigger scope of the project? And then, finally, solicitation-specific criteria—is it clear what the impact of this project is for the PI? So make sure that, as you're thinking about your project as you're writing your project as you're reviewing these projects in your head, you're going through each of these three different criteria.

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00:21:04.160 --> 00:21:07.800

Bianca Garner: Next slide, please. And I believe, Mandy, this is you.

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00:21:08.340 --> 00:21:38.330

Amanda Simcox: Yes, yeah, this is switching over. So just putting up our contact information again. Please use the alias, and you will get a very quick response actually, and thank you so much for pointing out that you can type your questions when they come to you in the Q. A. We're actually going to go through a few frequently ask questions. I'm going to hand over to Andrea to handle the first one of these.

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00:21:38.340 --> 00:21:44.639

Amanda Simcox: And we'll answer those questions at the end of these frequently asked questions. Andrea.

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00:21:44.920 --> 00:21:58.910

Andrea Holgado (She/Ella): Yes, and perhaps this can answer a question. That is the first question that is in the Q&A. So in this frequently asked question a faculty member asks about being recently moved, and the answer to that is 'No'. Why? Because the goal of this program is for the faculty member. This new assistant professor to build capacity in that new institution.

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00:22:56.840 --> 00:23:07.810

Andrea Holgado (She/Ella): A piece of equipment I need for the project cost more than fifty thousand. Can I still request support for it? The answer is, yes. But also make sure that you remember that your budget is a total of five hundred thousand dollars.

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00:23:36.560 --> 00:23:53.539

Andrea Holgado (She/Ella): And another question is about the review process, and it was mentioned. We have a panel that is dedicated to the BRC-BIO program and is composed by scientists that are from many different areas of biology. And they review IM, BI and Solicitation specific criteria.

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00:24:27.980 --> 00:24:30.710

Jeremy Wojdak - DEB: Thank you, Andrea. You are up, Jeremy,

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Jeremy Wojdak - DEB: Another frequently asked question that we show here is about audience, right? Who is reading the proposals, and thus how should I frame my research, and as we've emphasized, this is a BIO-wide program. And so the reviewers are going to come from a fairly broad swath of biology. They will not necessarily be specialists in your topical area. And so you need to write in such a way that a broad audience can both understand and be excited by what you're proposing.

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00:25:11.470 --> 00:25:37.440

Jeremy Wojdak - DEB: And not just for ah BRC-BIO, but NSF proposals in general that's really good advice to keep in the back of your mind is that some reviewers may be close to your area, and some may be farther away, and you've got to satisfy both sets. And so that's just something to tuck away in your Grant writing toolkit.

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00:25:37.820 --> 00:25:55.999

Jeremy Wojdak - DEB: Next question. So some faculty will not have preliminary data relevant to their project, and they worry how that will be perceived. In this solicitation, preliminary data are not required.

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Jeremy Wojdak - DEB: And in fact, there's relatively few NSF programs that explicitly require it. Practically to be convincing, it is often very helpful, and that's the same in this case, right. If you do have preliminary data--that does help establish feasibility and plausibility of your plan, but it's not required. And so, if you don't have preliminary data, other ways that you can address the plausibility of your plan are important to think about. Do you have expertise? Are you partnering with somebody who has demonstrable skills in this area? Have other people collected preliminary data, like the data that you imagine--any of those can help make a convincing case that you can accomplish the work that you've proposed.

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00:26:56.680 --> 00:27:19.360

Jeremy Wojdak - DEB: Is the project really only six pages? And how can I possibly put all this stuff that you've been saying into six pages? Excellent question. We very purposefully shaped the application process to try to lower the workload the barrier for busy faculty to submit.

00:27:19.370 --> 00:27:25.210

Jeremy Wojdak - DEB: So it's short and that comes with its own constraints, including enough detail for both the science that you propose and the potential impacts that it can have on your career and your institution and your students is a challenge, but it's actually a challenge that will serve you well as writing concisely is again a sort of general grant writing tool that you want to have in your belt. As projects get larger and more complex, fifteen pages will seem too short. So this is. This is good practice of really honing your message to make a compelling case in a few words.

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00:28:21.580 --> 00:28:30.399

Jeremy Wojdak - DEB: All right. Can I use the impact statement to also describe broader impacts? Absolutely. The impacts that would could accrue to your institution, to your career, to your students will be tightly linked with the broader impacts. And so there is likely going to be overlap in how you describe each of these. And so some aspects may show up, both in a broader impact section of the project description and in your impact statement. It's up to you to decide how best to use that space to make that compelling case without being duplicative and repeating information, especially given the short project description.